What is claimed is:

1. An ink-jet printhead, comprising:

a substrate;

an ink chamber to be filled with ink to be ejected formed on an upper surface of the substrate;

a restrictor, which is a path through which ink is supplied from an ink reservoir to the ink chamber, perforating a bottom surface of the substrate and a bottom surface of the ink chamber;

a nozzle plate, which is stacked on the upper surface of the substrate and forms an upper wall of the ink chamber;

a nozzle perforating the nozzle plate at a position corresponding to a center of the ink chamber;

a heater formed in the nozzle plate to surround the nozzle; and

a conductor for applying a current to the heater.

2. The ink-jet printhead as claimed in claim 1, wherein the restrictor has a length of about 200-750 μm.

3. The ink-jet printhead as claimed in claim 1, wherein the heater surrounds the nozzle.

4. The ink-jet printhead as claimed in claim 3, wherein the heater is formed of one material selected from the group consisting of TaAl, TiN, CrN, W, and polysilicon.

5. The ink-jet printhead as claimed in claim 1, wherein the conductor is formed of aluminum or an aluminum alloy.

6. The ink-jet printhead as claimed in claim 1, wherein the nozzle plate includes a plurality of passivation layers.

7. The ink-jet printhead as claimed in claim 6, wherein the plurality of passivation layers includes a first passivation layer, a second passivation layer, and a third passivation layer, which are sequentially stacked on the substrate, and wherein the heater is disposed between the first passivation layer and the second passivation layer, and the conductor is disposed between the second passivation layer and the third passivation layer.

8. The ink-jet printhead as claimed in claim 6, wherein each of the plurality of passivation layers is formed of at least one material selected from the group consisting of SiO_2, Si_3N_4, SiC, Ta, Pd, Au, TaO, TaN, Ti, TiN, Al_2O_3, CrN, and RuO_2.

9. The ink-jet printhead as claimed in claim 6, wherein the nozzle plate further includes a heat dissipating layer stacked on the plurality of passivation layers.

10. The ink-jet printhead as claimed in claim 9, wherein the heat dissipating layer defines an upper portion of the nozzle and is formed of a metallic material having thermal conductivity to dissipate heat generated by the heater and heat remaining around the heater.

11. The ink-jet printhead as claimed in claim 10, wherein the heat dissipating layer is formed of at least one material selected from the group consisting of Ni, Fe, Au, Pd, and Cu.

12. The ink-jet printhead as claimed in claim 9, wherein the heat dissipating layer has a thickness greater than about 10 μm.

13. A method for manufacturing an ink-jet printhead, comprising:

(a) preparing a substrate;

(b) sequentially stacking a plurality of passivation layers on the substrate and forming a heater and a conductor connected to the heater between adjacent passivation layers;

(c) forming a heat dissipating layer on the plurality of passivation layers and forming a nozzle perforating the passivation layers and the heat dissipating layer;

(d) etching a bottom surface of the substrate and forming a restrictor in communication with an ink reservoir; and

(e) etching the substrate exposed through the nozzle to be in communication with the restrictor and forming an ink chamber to be filled with ink.

14. The method as claimed in claim 13, wherein sequentially stacking the plurality of passivation layers on the substrate and forming the heater and the conductor connected to the heater between adjacent passivation layers comprises:

forming a first passivation layer on an upper surface of the substrate;

forming the heater on the first passivation layer;

forming a second passivation layer on the first passivation layer and the heater;

forming the conductor on the second passivation layer; and

forming a third passivation layer on the second passivation layer and the conductor.

15. The method as claimed in claim 13, wherein forming the heat dissipating layer on the plurality of passivation layers and forming the nozzle perforating the plurality of passivation layers and the heat dissipating layer comprises:

patterning the plurality of passivation layers and exposing an upper surface of the substrate;

forming a sacrificial layer for forming the nozzle on the exposed substrate;

forming a heat dissipating layer on the plurality of passivation layers; and

removing the sacrificial layer and forming the nozzle.

16. The method as claimed in claim 15, wherein the sacrificial layer is formed of a photoresist.

17. The method as claimed in claim 15, wherein the heat dissipating layer is formed by electroplating.

18. The method as claimed in claim 15, wherein the heat dissipating layer has a thickness greater than about 10 μm.